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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,296	09/21/2005	Hiroshi Shimada	8013-1250	1929
<small>465</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			<small>7590</small> EXAMINER GRABOWSKI, KYLE ROBERT	
			ART UNIT 3725	PAPER NUMBER
			MAIL DATE 09/02/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/550,296

**Applicant(s)**

SHIMADA ET AL.

**Examiner**

Kyle Grabowski

**Art Unit**

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-36 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-31, 33, 34, 36 and 44 is/are rejected.
- 7) ☒ Claim(s) 32 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2005 and 22 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09/21/05, 06/16/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

The species were provided as follows:

I: Figures 1-16

II: Figures 17-19

III: Figure 20

IV: Figure 21

V: Figure 22

VI: Figure 23

Applicant's election without traverse of Group I, Figures 1-16, corresponding to claims 23-36 and 44, in the reply filed on 06/16/08 is acknowledged.

### ***Claim Objections***

Claims 33 and 35 are objected to because of the following informalities: There is no proper antecedent basis for "the pinching part" or "opposed pinching parts". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 23-26, 28-29, 33, 36, and 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over Montessi (US 2,727,550) in view of Sun et al. (US 4,730,972).

In respect to claims 23, 24, and 44, Montessi discloses a binder for holding sheets 8 with holes 12 aligned down the center and a front cover 1 comprised of two front cover parts formed of flat boards and connected to the "back cover part" (spine) 2. Montessi does not disclose a locking bar which engages a band-shaped back board to secure the sheets, however Sun et al. teach an improved fastening mechanism which includes a locking bar 14 and a band-shaped back board 11 comprising: a space setting means (Fig. 2A-2C) wherein the sheets are placed and held between a locking bar 14 and the front cover (the bottommost page of pages 40), the distance between each surface (opposing front and back major surfaces) of the locking bar 14 and the front cover set arbitrarily by the number of sheets to be bound.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the rudimentary binding mechanism 5 taught in Montessi with the fastening system in view of Sun et al. to allow for a wide range of sheet thicknesses to be accommodated and selectively locked to the binding (Col. 2, 18-45).

In respect to claims 25, 26, and 33, Sun et al. further teach: a plurality of key-shaped locking parts 8 on the band-shaped back board 11 that penetrate through the sheet hole parts; a plurality of tying parts 20 provided in the locking bar 14 corresponding to the positions of the key-shaped locking parts 8, to hold the sheets 40 between (Fig. 2C). As shown in Montessi, a substitution of the binding mechanism 5 for the band-shaped back board 11 taught in Sun et al., results in penetration through holes 3 in the "back cover part" (spine) 2 of front cover 1 (Montessi, Fig. 6); the top key parts 8 provided on the tip of pinching parts 12a and 12b protrude inward and sandwich the locking bar 14 therebetween (Fig. 2B)

In respect to claim 28, Sun et al. further disclose the tying parts 20 of the locking bar 14 have a smaller diameter than a pressure part (which comprises the rest of the locking bar 14 in that the user applies pressure 47 thereon (Fig. 2A).

In respect to claims 29 and 36, Sun further discloses the locking bar 14 featuring a concave surface formed between ridges 25 and 26 (Fig. 3) and an acute angle formed

between a joining groove 21 and a bottom part 22 of that groove that corresponds to the shape of the key-shaped locking parts 8 (Fig. 3).

Claims 23, 25, 28, 30, 31, and 34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Montessi (US 2,727,550) in view Fortenberry (US 6,578,240).

In respect to claims 23 and 25, Montessi substantially discloses the claimed subject matter for the reasons stated above but does not disclose a locking bar which engages a band-shaped back board to secure the sheets, the band-shaped back band having a tying part on the locking bar which comprises four symmetrical grooves carved along the long axis direction on a circular surface.

.Fortenberry discloses an improved fastening mechanism which includes a locking bar 14 and a band-shaped back board 56 comprising: a space setting means which accommodates for different sized paper stack widths (Fig. 3) wherein the sheets are placed and held between a locking bar 14 and a the front cover (the uppermost page of pages 18) (Fig. 1), the distance between each surface (opposing front 24 and back 36 major surfaces) of the locking bar 14 and the front cover set arbitrarily by the number of sheets to be bound.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the rudimentary binding mechanism 5 taught in Montessi with the fastening system in view of Fortenberry to allow for a wide range of sheet thicknesses to be accommodated and selectively locked to the binding.

In respect to claims 28, 30, and 31, Fortenberry further discloses a plurality of key-shaped locking parts 60 on the band-shaped back board 56 that penetrate through the sheet hole parts; tying part 22, having a smaller diameter than pressure part 20, provided in the locking bar 14 corresponding to the positions of the key-shaped locking parts 60, to hold the sheets 18 between; the tying part 22 forms a curved surface and a locking part comprising grooves 30 which are disposed along the long axis of the curved surface (Fig. 4); the grooves are disposed symmetrically in a radial four element array (Col. 5, 11-17). As shown in Montessi, a substitution of the binding mechanism 5 for the band-shaped back board 36 taught in Fortenberry, results in penetration through holes 3 in the "back cover part" (spine) 2 of front cover 1 (Montessi, Fig. 6).

In respect to claim 34, Fortenberry further discloses, non-slip protrusion parts 42 project from the center of the grooves 30 to lock the key-shaped locking parts 60 (Fig. 3).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montessi (US 2,727,550) in view of Sun et al. (US 4,730,972) as applied to claim 25 above, and further in view of Joe et al. (US 6,086,106). Montessi further discloses that the sheets 8 are formed from a transparent plastic that are cemented along narrow tongues 10, provided with holes 12, and openings along their "upper" edges, the edges furthest from the center binding –and therefore uppermost when the binder is closed (Col. 1, 65 – Col. 2, 8; Fig. 4); Montessi does not disclose that the pouches are pressure bonded, however, Joe et al. disclose utilizing pressure bonding (high frequency or

ultrasonic welding) to form a pocket in a transparent sheet (Col. 3, 52-54) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to seal the sheets taught in Montessi as modified by Sun et al. with pressure bonding to effectively seal the pockets in view of Joe et al. without additional material (cement) as is well known in the art.

### ***Allowable Subject Matter***

Claims 32 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In respect to claim 32, no cited prior art anticipates or renders obvious all of the limitations of claims 23, 25, 28, and additionally, *wherein in the pressure part, the center axis line of the tying part is provided at a slant in a specific direction from the center axis of the pressure part.*

In respect to claim 35, no cited prior art anticipates or renders obvious all of the limitations of claims 23 and 25, and additionally, *wherein in the key-shaped locking part, a board-shaped stopper part which is lower in height than the pinching part is formed between the opposing pinching parts to protrude perpendicular to the back cover part.*

### ***Conclusion***



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle Grabowski whose telephone number is (571)270-3518. The examiner can normally be reached on Monday-Thursday, every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571)272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kyle Grabowski/  
Examiner, Art Unit 3725

/Derris H Banks/  
Supervisory Patent Examiner, Art  
Unit 3725

